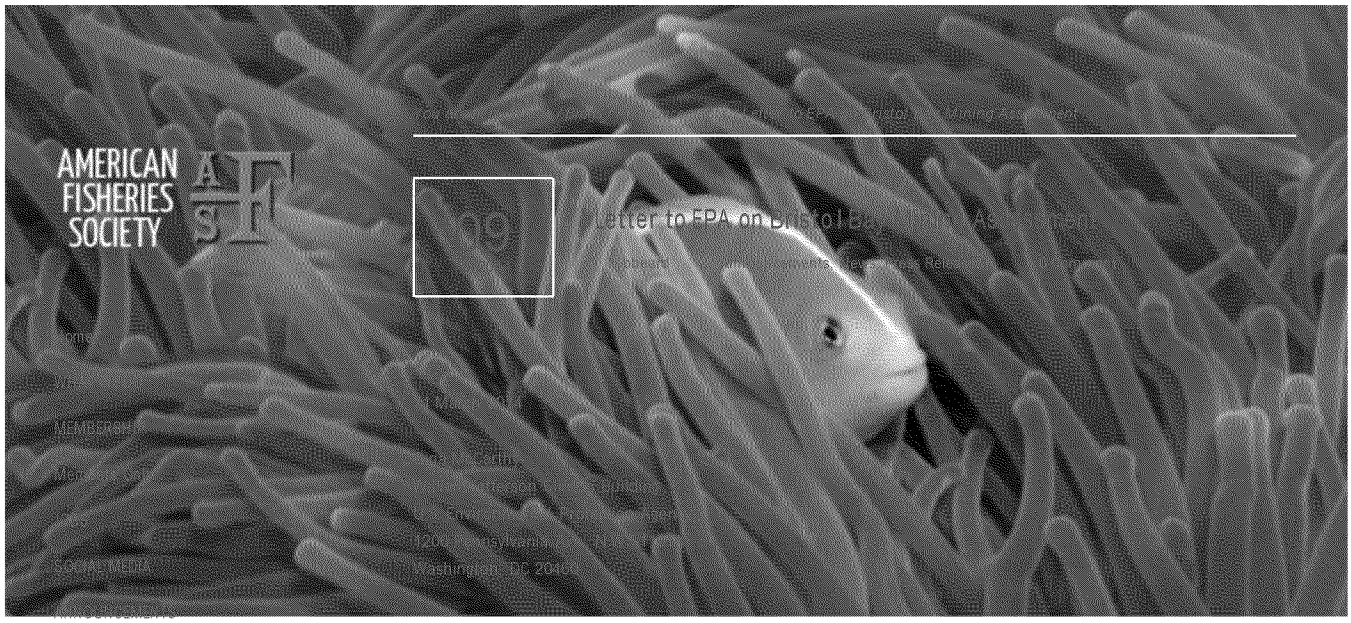

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Dear Administrator McCarthy:

The American Fisheries Society (AFS) submits this letter in appreciation and support of the recently completed EPA report entitled "An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska." As its President, I am writing to advise you that the AFS Governing Board recommends that the EPA use its authority to prevent elimination and/or impairment of waters and wetlands supporting the extraordinarily prolific, sustainable, all-wild Bristol Bay salmon fisheries. Depending on the year, AFS represents 7,000-9,000 professional fishery scientists and resource managers. Our mission is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. We recognize that Bristol Bay's unimpaired watersheds and wild sustainable commercial, recreational, and subsistence fisheries represent an extraordinarily rare resource of national and global importance. Decisions regarding proposed development of a metal mining district in watersheds supporting the world's largest and most valuable wild salmon fisheries (1) represent globally important fisheries decisions; thus, AFS is keenly interested in having the science behind these decisions be the best possible.

AFS has closely followed EPA progress on the Watershed Assessment during the last three years; our Water Quality Section, Resource Policy Committee, Western Division, Officers, and members with professional fisheries-mining experience both reviewed and commented on prior drafts. We have now reviewed the final report and the peer-review record, and believe that EPA conducted a comprehensive, rigorous, professional review incorporating the best available science and addressing every substantive peer-review critique. The record is clear and transparent on the public website. The Assessment provides an indispensable resource to inform policy decisions during which costs, benefits and risks to public salmon resources will be weighed in determining the future of mining and salmon in Bristol Bay.

The EPA Watershed Assessment recognizes that Bristol Bay is extraordinary because it produces about half the world's wild Sockeye Salmon supply with runs averaging 37.5 million fish. The wild salmon fishery in Bristol Bay has been managed in a sustainable manner since 1884, and recently was valued at $1.5 billion U.S. nationally (2). In addition to Sockeye, it supports one of the world's largest remaining wild Chinook Salmon runs and healthy Coho, Chum and Pink Salmon runs. These salmon sustain lucrative commercial and recreational fisheries and provide jobs and food security to 25 rural Alaska Native villages and thousands of people. Bristol Bay represents a rare unaltered living laboratory where we can learn how healthy salmon ecosystems function and apply that knowledge to improve faltering salmon rehabilitation efforts in the conterminous U.S. where 40% of populations are extirpated from historic habitats, a third of remaining populations are threatened or endangered with extinction, and the spectre of climate change threatens cold water fish populations nationally.

Our AFS review found that the Watershed Assessment rigorously considered mining risks to salmon and based realistic mine scenarios on plans commissioned by mine proponents, state of the art mining and mitigation techniques, and, in our view, optimistic assumptions that no significant human or engineering failures would occur. Given that EPA quantified impacts from developing approximately half of the estimated Pebble ore body and did not quantify additional impacts from port facilities, power generation and transmission, and urbanization and other infrastructure, the assessment of potential impacts is very conservative and actual impacts would very likely be much greater.

Considering the conservative nature of the Watershed Assessment during routine operation, EPA estimated development of just 6.5 billion tons of the estimated 10.8 billion ton Pebble ore deposit would result in a loss of 94 miles of salmon supporting streams and 5,350 acres of wetlands ponds and lakes in the mine footprint. Altered water flows would likely impair ecosystem function in 33 additional stream miles and mine pollution would likely affect fish in 51 stream miles. Accidents and failures likely to occur include wastewater treatment plant failures, road-stream crossing failures, spills, and pipeline failures–all of which would harm fish. Toxic mine waste, leachates, wastewater, and tailings dams should be monitored, maintained and managed during and after mining–into perpetuity. A tailings dam failure would have catastrophic effects on fishery resources. Based on past mining district histories and its Alaska location, it is highly likely that damage to aquatic resources from mining would be unavoidable and permanent, and compensatory mitigation and remediation would be insufficient to make up for losses to aquatic habitats.

Such impacts are contrary to recent recommendations for mining law and regulation policy changes in a recent AFS publication (3), namely:

- Designate sensitive lands and waters as off limits to hard rock exploration and development;
- Prohibit mines likely to result in perpetual water pollution and/or requiring perpetual water treatment; and
- Prohibit mine discharges to surface or ground waters that degrade water quality.

The conservative Watershed Assessment and our collective experience indicate that development of large-scale copper -porphyry ore deposits in the Bristol Bay watershed would likely have irreversible impacts. Such development is contrary to AFS recommended mine policy (4) because:

- the region is highly sensitive to copper-porphyry mining pollution because of interconnected ground and surface waters of low buffering capacity;
- perpetual water pollution would result;
- perpetual water treatment and waste management would be required, and both surface and ground water quality would be degraded.

Therefore, the AFS Governing Board recommends that the EPA use its authority under section 404(c) of the Clean Water Act to prevent elimination and/or impairment of waters and wetlands supporting the extraordinarily prolific, sustainable, all-wild Bristol Bay salmon fisheries. Whether or not EPA chooses to deny a mining permit, AFS also recommends implementation of a statistically and ecologically rigorous monitoring program with the State of Alaska or independent contractors (as an intensified part of EPA's National River and Stream Assessment) to document the status and trends of the area's fish populations and their physical and chemical habitat.

AFS appreciates the comprehensive rigorous professional and transparent manner in which the Watershed Assessment was prepared and released. We also appreciate the opportunities we had to review prior drafts and to provide comments. Please feel free to contact us with any further questions.

Sincerely yours,

Robert M. Hughes

President

cc: AFS Governing Board

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(1) Knapp et al. 2013. The economic importance of the Bristol Bay salmon industry. Institute of Social and Economic Research. University of Alaska, Anchorage. Available at:

http://www.iser.uaa.alaska.edu/people/knapp/personal/2013_ 04TheEconomicImportanceOfTheBristolBaySalmonIndustry.pd f

(2) Ibid.

(3) Fisheries Vol. 37(2):54-55. Available at: http://www.pebblescience.org/pdfs/O'Neal_Hughes_2012.pdf.

(4) Hughes et al. 2013. Position Paper and AFS Policy Statement on Mining and Oil and Gas Extraction. Available at:

http://afsmembers.org/wpcontent/uploads/2014/01/POSITION _PAPER_FOR_DRAFT_AFS_MINING_POLICY_for_comment1.pdf

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